

# ABSTRACT

An optical medium having a high refractive index without anisotropy and a wide transmission wavelength is obtained.

5 The cubic crystal material is  $\alpha\beta\text{O}_3$ , where  $\alpha$  is at least one of K, Ba, Sr, Ca, and  $\beta$  is at least one of Ta, Ti. Optimally, the cubic crystal material is  $\text{KTa}_{1-x}\text{Nb}_x\text{O}_3$ , where composition  $x$  is  $0 \leq x \leq 0.35$ . This composition enables to raise refractive index while its phase transition temperature is below a room  
10 temperature.